

# NOTEWORTHY PLANTS FROM NORTH FLORIDA. V.

LORAN C. ANDERSON

*Department of Biological Science*

*Florida State University*

*Tallahassee, FL 32306-2043 U.S.A.*

## ABSTRACT

The following appear to be first reports for the state of Florida: *Anthemis arvensis*, *Artemisia vulgaris*, *Carex leavenworthii*, *Cerastium semidecandrum*, *Cicuta maculata*, *Cladium mariscoides*, *Curcuma zedoaria*, *Hedyotis purpurea*, *Paspalum minus*, *Ranunculus marginatus*, and *Silene virginica*. Some additions to the Florida panhandle are documented here also, and several significant range extensions, particularly for rare or endangered taxa within our area, are given.

This is the fifth installment of a series (Anderson 1984, 1986, 1988a, 1989) to update our knowledge of the flora of the Florida panhandle and Clewell's (1985) guide to the flora. The area of coverage is from the Suwannee River west to the Alabama state line.

New discoveries — i.e., taxa not listed by Clewell — and range extensions of selected rare or otherwise noteworthy taxa are given here. Exotics that appear to be adventive or naturalized are also listed. Collections at FLAS, FSU, USE and the Gholson Herbarium were consulted in addition to pertinent literature. Wilhelm (pers. comm.) provided updated distributional data for his 1984 study, and Wunderlin (pers. comm.) shared his Florida checklist of vascular plant species. Voucher specimens for this report are at FSU unless noted otherwise.

## TAXA NEW TO THE AREA

*ACACIA ANGUSTISSIMA* (P. Miller) Kuntze var. *HIRTA* (Nutt.) B. L. Robinson. Dixie Co.: frequent near junction rtes 358 and 361, just NE of Jena, 2 Jun 1989, *Anderson 12045* (FLAS, FSU). Jefferson Co.: Monticello, Jun 1931, *J. K. Small s.n.* (FLAS); new to Florida panhandle.

*AMORPHA HERBACEA* Walt. var. *HERBACEA*. Dixie Co.: frequent in cut-over flatwoods bordering rte 361, ca. 6 air mi S of Steinhatchee, 2 Jun 1989, *Anderson 12050*; new to Florida panhandle. See map in Wilbur (1975) for previously known range.

*ANTHEMIS ARVENSIS* L. Jackson Co.: weed in garden area, 1 mi W of Grand Ridge, 11 and 18 May 1980, *A. K. Gholson 8298, 8302* (Gholson Herbarium); naturalized, new to Florida.

**ARTEMISIA VULGARIS L.** **Alachua Co.:** roadside by wet woods N side of Gainesville, 11 Nov 1980, *K. D. Perkins* 855 (FLAS); **Escambia Co.:** Pensacola near Pensacola Bay, 17 Sep 1980, *J. K. Burkbalter* 7210 (FLAS); abundant along sandy roadside of Hollywood Avenue near Pensacola, 29 Oct 1989, *J. R. Burkbalter* 11717; naturalized, new to Florida.

**BOTHRIOCHLOA ISCHAEMUM (L.) Keng. var. SONGARICA (Fish. & Mey.) Celarier & Harlan.** **Escambia Co.:** Naval Air Station, SW of Pensacola, 17 Sep 1988, *J. R. Burkbalter* 11138; vacant field S of Pensacola, 24 Sep 1988, *J. R. Burkbalter* 11149; W end of Santa Rosa Island, 28 Oct 1989, *J. R. Burkbalter* 11715; **Santa Rosa Co.:** hiway 98 E of Gulf Breeze, 6 Nov 1988, *J. R. Burkbalter* 11310; **Washington Co.:** beside hiway 90 in Chipley, 10 May 1990, *L. C. Anderson* 12714; native, new to Florida panhandle.

**CAREX LEAVENWORTHII Dewey.** **Gadsden Co.:** locally established near Marion Street, Chatrahoocsee, 10 May 1990, *L. C. Anderson* 12681, 26 Aug 1985, *A. K. Gholson* 11305 (Gholson Herbarium); **Jackson Co.:** Neal's Landing, Lake Seminole, under *Quercus* above floodplain, 18 May 1982, *A. K. Gholson* 9729 (Gholson Herbarium); native, new to Florida.

**CERASTIUM SEMIDECANDRUM L.** **Escambia Co.:** abundant on sandy roadside of Sauffley Field Road near Pensacola, 9 Mar 1990, *J. R. Burkbalter* 11811; naturalized, new to Florida.

**CICUTA MACULATA L.** **Jackson Co.:** frequent along open border of pine-oak woodland on S side of I-10, ca. 5 air mi SSW of Sneads, 26 May 1990, 12 Jul 1990, *L. C. Anderson* 12846, 13093; apparently native, new to Florida.

**CLADIUM MARISCOIDES (Muhl.) Torr.** **Santa Rosa Co.:** abundant in ditch E of Gulf Breeze on S side of hiway 98, 16 Jul 1989, *J. R. Burkbalter* 11500; native, new to Florida. Kükenthal (1942) listed Florida as part of this species' range, but recent workers have found no documented collections for the state—see Bridges and Orzell (1989) for notes on the ecology and geography of this species in the eastern United States.

**CURCUMA ZEDOARIA (Christm.) Rosc.** **Leon Co.:** locally established along margin of Freeman Creek Cove of Lake Talquin, ca. 17 air mi W of Tallahassee, 24 May 1989, *L. C. Anderson* 12007; naturalized, new to Florida.

**CYPERUS ECHINATUS (L.) Wood.** **Gulf Co.:** edge of wet flatwoods 5.5 air mi NW of Wewahitchka, 15 Jun 1989, *L. C. Anderson* 12095; native, new to Florida panhandle.

**ELEOCHARIS ROSTELLATA Torr.** **Taylor Co.:** common in roadside ditch beside tidal marsh near mouth of Fish Creek, ca. 2.5 air mi SSE of Keaton Beach, 2 Jun 1989, *L. C. Anderson* 12060; **Wakulla Co.:** St. Marks, 1843

or 1845, *F. Rugel* 281 (FLAS); not listed by Clewell (1985) for the Florida panhandle.

**HEDYOTIS PURPUREA** (L.) T. & G. **Jackson Co.:** alluvial area below Neal's Landing, Lake Seminole, 24 Apr 1972, *Gholson* 3039, 3040 (Gholson Herbarium), Neal's Landing, 17 May 1978, *Gholson* 7100 (Gholson Herbarium); native, new to Florida.

**INDIGOFERA SPICATA** Forskal. **Leon Co.:** frequent in newly sodded lawn, ES.U. campus, Tallahassee, 21 May 1990, *Anderson* 12851; fallow field, Tallahassee, 3 Dec 1990, *Anderson* 13342. **Taylor Co.:** frequent in dry sand of disturbed site along Alvarez Street in Perry, 21 Jun 1989, *Anderson* 12067 (FLAS, FSU); naturalized, new to Florida panhandle. Morton (1989) reports this species is widespread in southern Florida, where it is a hazard to grazing animals (some horses have been fatally poisoned).

**MURDANNIA KEISAK** (Hassk.) Hand.-Mazz. **Jackson Co.:** extensive mats along shoreline of Lake Seminole near Parramore Landing, 13 Sep 1976, *Gholson* 3553 (Gholson Herbarium); naturalized, new to Florida panhandle. This Asian species has been spreading in the southeastern United States relatively recently (Dunn and Sharitz 1990).

**PASPALUM MINUS** Fourn. **Escambia Co.:** near Perdido River, N of hwy 90 and NW of Pensacola, 7 Aug 1990, *Burkhalter* 12223; native, new to Florida.

**RANUNCULUS MARGINATUS** D'Urville var. **TRACHYCARPUS** (Fischer & Meyer) Azn. **Washington Co.:** moist sandy loam of shaded floodplain of Holmes Creek at roadside park beside rte 79 just N of Vernon, 4 May 1990, *Anderson* 12631; native, new to Florida (see Keener and Hoot 1987).

**SILENE VIRGINICA** L. **Bay Co.:** frequent with *Carex baltzellii* on shaded steep slopes of ravine E of Hammond Lake, ca. 3.5 air mi WNW of Fountain, 4 May 1990, *Anderson* 12679; new to Florida. This species has been found sporadically in other southern states (Moore 1956), and Kral (1966) suggests this Pleistocene relict has been able to persist by inhabiting ravine banks where cold air drainage provides a suitable niche in an otherwise inhospitable environment.

**SOLANUM PSEUDOCAPSICUM** L. **Jefferson Co.:** persisting shrub in mesic hardwoods of Avalon Plantation, S of Capps, 26 Apr 1989, *Gholson* 12126 (Gholson Herbarium), 1 Mar 1989, *Godfrey* 83004; naturalized, new to Florida panhandle.

#### ADDITIONAL RANGE EXTENSIONS

The following collections represent additional counties of record for taxa listed by Clewell (1985) from only one county, or they are significant range

extensions for rare or otherwise noteworthy species.

**ARNOGLOSSUM DIVERSIFOLIUM** (T. & G.) H. Robins. **Holmes Co.:** 4 mi S of rte 2 on rte 177, 26 May 1967, *Smith 1324* (FLAS). **Jackson Co.:** Chipola River, 6 mi S of Marianna, 6 Jun 1957, *Kral 4813* (FLAS). **Walton Co.:** shaded floodplain of Choctawhatchee River just S of rte 20, 25 May 1990, *Anderson 12814*. **Washington Co.:** Holmes Creek at rte 280, 30 Jul 1954, *E. S. Ford 3779* (FLAS); upper Holmes Creek, ca. 5.5 air mi SW of Chipley, 31 May 1985, *Anderson 8207*, 15 Jun 1989, *Anderson 12111*; Hightower Spring, 3.5 air mi WSW of Vernon, 25 May 1990, *Anderson 12820*; Brunson Landing, Holmes Creek, ca. 3 air mi WSW of Vernon, 15 Jun 1990, *Anderson 12941*; Live Oak Landing, Holmes Creek, 7.5 air mi WSW of Vernon, 22 Jun 1990, *Anderson 12958*; new counties of record for this threatened species (state listed, Wood 1990).

**ASCLEPIAS RUBRA** L. **Escambia Co.:** 3.5 mi E of Muskogee, 7 Jun 1962, *E. S. Ford 6312a* (FLAS); Spanish Mill Creek at Gonzalez, 26 Jul 1980, *Burkhalter s.n.* (FLAS). **Santa Rosa Co.:** edge of mesic thicket, Paquette Camp, Blackwater State Forest, 29 Jun 1990, *Anderson 13013*. **Walton Co.:** bayhead 6.5 mi SE of DeFuniak Springs, 1 Jun 1954, *West & Arnold s.n.* (FLAS); boggy area 3.5 mi S of DeFuniak Springs, 29 May 1967, *Smith 1335* (FLAS).

**CAREX BALTZELII** Chapm. ex Dewey. **Escambia Co.:** wooded slope on Univ. W. Fla. campus near Pensacola, 2 Apr 1978, *Burkhalter 5748* (FLAS). **Okaloosa Co.:** 6.5 air mi N of Ft. Walton Beach, 20 Mar 1968, *Ward 6603* (FLAS); near Rogue Creek, 7 mi NW of Niceville, 20 Mar 1968, *Ward 6599* (FLAS). **Santa Rosa Co.:** Weaver Creek, 5 mi N of Holley, 21 Mar 1968, *Ward 6637* (FLAS). **Washington Co.:** frequent on shaded slopes of sinkhole ravine ca. 12 air mi S of Chipley, 26 May 1990, *Anderson 12830*. This endangered species (Wood 1990) is nearly endemic to the Florida panhandle; Muller et al. (1989) give the previously known range of this species.

**CAREX SEORSA** Howe. **Liberty Co.:** common on floating islands in beaver-dammed swamp of Pittman Creek just N of rte 20, 0.8 mi W of Ochlockonee River, 22 May 1990, *Anderson 12741*.

**CONOPHOLIS AMERICANA** (L.f.) Wallr. **Okaloosa Co.:** oak-beech-magnolia woods SW of Laurel Hill, 3 Mar 1990, *Burkhalter 11807*; new to western panhandle (not listed by Wilhelm 1984).

**DIOCLEA MULTIFLORA** (T. & G.) Mohr (= *Galactia moblenbrockii* Maxwell). **Gadsden Co.:** mesic hardwoods of Chattahoochee Nature Park below Morgan Avenue near Apalachicola River on SW side of Chattahoochee, 4 June 1990, *Anderson 12858*. **Washington Co.:** head of Blue

Springs just E of Econfina Creek, ca. 14 air mi SE of Vernon, 24 May 1990, *Anderson 12768*.

*DROSERA FILIFORMIS* Raf. **Washington Co.:** with *D. intermedia* on open, peaty shore of Lucas Lake, 8 Jun 1990, *Anderson 12875*; edge of Rattlesnake Lake, 5 Jul 1990, *Anderson 13042*; with *D. tracyi* (no signs of intergradation) in small seepage bog on S side of Gully Lake, 5 Jul 1990, *Anderson 13048*.

*HEDYOTIS NUTTALLIANA* Fosberg. **Washington Co.:** frequent in dry sand of open turkey oak woodland ca. 12 air mi S of Chipley, 26 May 1990, *Anderson 12831*. The only other collection in Florida from Walton County was listed as quite atypical by Terrell (1959).

*JUNCUS GYMNOCARPUS* Coville. **Washington Co.:** sphagnum seepage in mixed hardwoods of steephead 5 air mi SE of Vernon, 31 May 1985, *Anderson 8200*; loamy sand of mesic woodland E of Gap Lake, ca. 15 air mi S of Chipley, 11 May 1990, *Anderson 12721*; with *Kalmia latifolia* along White Oak Creek, NE of Gap Lake, 8 Jun 1990, *Anderson 12897*.

*LUDWIGIA ERECTA* (L.) Hara. **Walton Co.:** marshy border of Fuller Lake on Coffeen Nature Preserve near Four Mile Village just E of Sandestin, 21 Oct 1989, *Anderson 12487*. The species was first reported for the Florida panhandle by Anderson (1986); this collection extends its range westward significantly.

*LUDWIGIA LANCEOLATA* Ell. **Walton Co.:** Pine flatwoods between coastal dunes and Fuller Lake in Four Mile Village (Coffeen Nature Preserve), 21 Oct 1989, *Anderson 12479*. This is a range extension westward from Franklin County (Peng 1989).

*MATELEA FLAVIDULA* (Chapm.) Woodson. **Washington Co.:** infrequent in hardwoods on upper slopes of small sinkhole ravine just N of Washington Blvd, 12 air mi S of Chipley, 8 Jun 1990, *Anderson 12891*.

*NEPTUNIA PUBESCENS* Benth. **Taylor Co.:** Frequent along edge of tidal marsh at N edge of Keaton Beach, 2 Jun 1989, *Anderson 12062*.

*PHYSOSTEGIA GODFREYI* Cantino. **Walton Co.:** swampy ditch SW of Bruce, 18 Jun 1971, *H. A. Davis 15829* (FLAS); locally common in mesic roadside depression along rte 20 just W of Black Creek bridge, 7.7 mi E of Freeport, 24 May 1990, *Anderson 12773*. These represent a significant range extension to the west for this Florida panhandle endemic (Cantino 1979).

*PINCKNEYA BRACTEATA* (Bartr.) Raf. **Washington Co.:** edge of *Magnolia-Liriodendron* thicket bordering Boggy Branch, 1.9 air mi W of rte 77 and Greenhead, 26 May 1990, *Anderson 12836*; listed as threatened in Florida (Wood 1990).

**PLUCHEA OBLONGIFOLIA** Nash. Dixie Co.: 4 mi N of Shired Island, 10 Jul 1989, *Godfrey* 83348. Taylor Co.: mesic woodland near Fish Creek, 3.5 air mi SE of Keaton Beach, 2 Jun, 1989, *Anderson* 12059.

**RHEXIA SALICIFOLIA** Kral & Bostick. Okaloosa Co.: E of Destin along Four Prong Lake, 11 Jul 1990, *A. F. Johnson* 8747; new county record for this rare species (Bounds 1987). Its center of distribution appears to be the karst lake region of Washington County, where it is usually associated with endangered *Hypericum lissophloeus* and *Xyris longisepala* (Wood 1990), and the following collections further document its presence there: Washington Co.: Chain Lakes, W of Greenwood, 6 Jul 1963, *Godfrey* 62951 (FLAS); Sparkleberry Lake, 15 Jun 1990, *Anderson* 12935; Piney Lake, 6 Jul 1990, *Anderson* 13077; Crystal Lake, 6 Jul 1990, *Anderson* 13082; 3 Aug 1990, *Anderson* 13153; Sand Lake, 3 Aug 1990, *Anderson* 13164; Whitewater Lake, 3 Aug 1990, *Anderson* 13170; Porter Lake, 3 Aug 1990, *Anderson* 13177; Major Lake, 1 Oct 1990, *Anderson* 13296.

**RHYNCHOSPORA CRINIPES** Gale. Santa Rosa Co.: banks of Sweetwater Creek, ca. 3 air mi S of Munson, 5 Aug 1989, *Johnson* 8368; Big Coldwater Creek, ca. 0.6 mi above rte 191 bridge, 29 Jun 1990, *Anderson* 12996. These collections increase the known range considerably for this very rare species (*Anderson* 1988b).

**STACHYS HYSSOPIFOLIA** (Michx.) var. **LYTHROIDES** (Small) J. B. Nelson. Jefferson Co.: periodically wet pine-hardwood stand on Norias Plantation, NNE of Lake Miccosukee, 19 Jul 1990, *Godfrey* 83917, 27 Jul 1990, *Anderson* 13098. This Florida endemic was previously known only from a few collections in Leon County (Nelson 1981).

**UVULARIA SESSILIFOLIA** L. Walton Co.: Knox Hill, 22 Mar 1968, *Ward* 6643 (FLAS). Washington Co.: 26 May 1990, *Anderson* 12827.

**XYRIS LONGISEPALA** Kral. Walton Co.: 3.5 mi SSW Mossy Head, 7 Aug 1969, *Ward* 7216 (FLAS); 3 mi SW Mossy Head, 10 Sep 1979, *Judd* 2255 (FLAS). Washington Co.: sandy shores of the following karst lakes: Parrish Pond, 8 Jun 1990, 5 Jul 1990, *Anderson* 12883, 13028; Boat Lake, 8 Jun 1990, *Anderson* 12885; Fox Pond, 8 Jun 1990, *Anderson* 12902; Sparkleberry Lake, 15 Jun 1990, *Anderson* 12934, 12936; Hammock Lake, 5 Jul 1990, *Anderson* 13037; Rattlesnake Lake, 5 Jul 1990, *Anderson* 13044; Gully Lake, 5 Jul 1990, *Anderson* 13047; Piney Lake, 6 Jul 1990, *Anderson* 13079; Crystal Lake, 3 Aug 1990, *Anderson* 13156; Sand Lake, 3 Aug 1990, *Anderson* 13163; Whitewater Lake, 3 Aug 1990, *Anderson* 13171; Porter Lake, 3 Aug 1990, *Anderson* 13173, 13176; unnamed lake W of Porter Lake, 3 Aug 1990, *L. C. Anderson* 13180; Mule Pond, W of Sunny Hills, 1 Oct 1990, *Anderson* 13293; Major Lake, 1 Oct 1990, *Anderson* 13298; new counties of record (Clewell 1985) for this Florida endange-

red species (Wood 1990). A Leon County collection (Lake Iamonia, 21 Aug 1989, L. C. Anderson 12198) is particularly interesting because at that location the plants occur in peaty muck of floating islands in the lake rather than in coarse sands bordering karst ponds as in all other known populations.

#### ACKNOWLEDGMENTS

My field work in 1990 was sponsored in part by the Florida Natural Areas Inventory. James R. Burkhalter, A. K. Gholson, and R. K. Godfrey are acknowledged for their continuing contributions to our knowledge of the flora of the Florida panhandle.

#### REFERENCES

- ANDERSON, L. C. 1984. Noteworthy plants from north Florida. *Sida* 10:295–297.
- . 1986. Noteworthy plants from north Florida. II. *Sida* 11:379–384.
- . 1988a. Noteworthy plants from north Florida. III. *Sida* 13:93–100.
- . 1988b. Status of endangered *Rhynchospora crinipes* (Cyperaceae). *Syst. Bot.* 13:405–410.
- . 1989. Noteworthy plants from north Florida. IV. *Sida* 13:497–504.
- BOUNDS, R. R. 1987. Rare species of *Rhexia* L. *Castanea* 52:304–308.
- BRIDGES, E. L., and S. L. ORZELL. 1989. Additions and noteworthy vascular plant collections from Texas and Louisiana, with historical, ecological, and geographical notes. *Phytologia* 66:12–69.
- CANTINO, P. D. 1979. *Physostegia godfreyi* (Lamiaceae), a new species from northern Florida. *Rhodora* 81:409–417.
- CLEWELL, A. E. 1985. Guide to the vascular plants of the Florida panhandle. Florida State University Press/University Presses of Florida, Tallahassee.
- DUNN, C. P., and R. R. SHARITZ. 1990. The history of *Murdannia keisak* (Commelinaceae) in the southeastern United States. *Castanea* 55:122–129.
- KEENER, C. S., and S. B. HOOT. 1987. *Ranunculus* section *Echinella* (Ranunculaceae) in the southeastern United States. *Sida* 12:57–68.
- KRAL, R. 1966. Observations on the flora of the southeastern United States with special reference to northern Louisiana. *Sida* 2:395–408.
- KÜKENTHAL, G. 1942. Vorarbeiten zu einer Monographie der Rhynchosporideae. XII. *Cladium*. *Repert. Spec. Nov. Regni. Veg.* 51:1–17, 139–193.
- MOORE, J. A. 1956. *Silene virginica* in the Gulf states. *Rhodora* 58:27–29.
- MORTON, J. E. 1989. Creeping indigo (*Indigofera spicata* Forsk.) (Fabaceae) — a hazard to herbivores in Florida. *Econ. Bot.* 43:314–327.
- MULLER, J. W., E. D. HARDIN, D. R. JACKSON, S. E. GATEWOOD, and N. CAIRE. 1989. Summary report on the vascular plants, animals, and plant communities endemic to Florida. Florida Game and Freshwater Fish Commission, Nongame Wildlife Program Tech. Rep. no. 7, Tallahassee.
- NELSON, J. B. 1981. *Stachys* (Labiatae) in southeastern United States. *Sida* 9:104–123.
- PENG, C. 1989. The systematics and evolution of *Ludwigia* sect. *Microcarpium* (Onagraceae). *Ann. Missouri Bot. Gard.* 76:221–302.
- TERRELL, E. E. 1959. A revision of the *Houstonia purpurea* group (Rubiaceae). *Rhodora* 61:157–180, 188–207.

- WILBUR, R. L. 1975. A revision of the North American genus *Amorpha* (Leguminosae — Psoraleae). *Rhodora* 77:337–409.
- WILHELM, G. S. 1984. Vascular flora of the Pensacola region. Unpubl. doctoral dissertation, Southern Illinois University, Carbondale.
- WOOD, D. A. 1990. Official lists of endangered and potentially endangered fauna and flora in Florida. Florida Game and Fresh Water Fish Commission (1 August), Tallahassee.